

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

MMB Docket No. **1671-0297**

J & J Reference: **DEP5255USNP**

Application of: **Hayden et al.**

Serial No. **10/814,097**

Filed: **March 31, 2004**

For: **Sliding Patellar Prosthesis**

Confirmation No.: **7290**

Group Art Unit: **3774**

Examiner: **Ann M. Schillinger**

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APPEAL BRIEF

Sir:

This is an appeal under 37 CFR § 41.31 to the Board of Patent Appeals and Interferences of the United States Patent and Trademark Office from the rejection of the claims 1-3, 10, 13, 14, 31, and 38-53 of the above-identified patent application. These claims were indicated as rejected in an Office Action dated September 14, 2010. The \$510.00 fee then required under 37 CFR § 41.20(b) (2) was submitted with the Appellants' first filed Appeal Brief and payment of the additional amount later required under 37 CFR § 41.20(b) (2), as amended, was authorized in the Appeal Brief filed on April 1, 2010. Therefore, no additional fees are believed to be due at this time.

Nonetheless, the Director is hereby authorized to charge any additional amount now due and requested to please provide any extensions of time that may be necessary and charge any further fees that may be due to Account No. 13-0014, but not to include any payment of issue fees.

(1) REAL PARTY IN INTEREST

DePuy Products, Inc. of Warsaw, Indiana is the assignee of this patent application, and the real party in interest.

(2) RELATED APPEALS AND INTERFERENCES

There are no appeals or interferences related to this patent application (serial no. 10/814,097).

(3) STATUS OF CLAIMS

Claims 1-3, 10, 13, 14, 31, and 38-53 are pending in the application.

Claims 4-9, 11-12, 15-30 and 32-37 have been canceled.

Claims 1-3, 10, 13, 14, 31, and 38-53 are rejected.

Claims 1-3, 10, 13, 14, 31, and 38-53 are being appealed, and are shown in the Appendix attached to this Appeal Brief.¹

¹ This Appendix is in the form previously required by the Examiner (see Notice of Non-Compliant Appeal Brief dated March 6, 2009) as discussed more fully below.

(4) STATUS OF AMENDMENTS

While the Appellants have filed no amendments after receipt of the September 14, 2010 Office Action (the “Office Action”), the status of the claims is not clear due to the Examiner’s failure to follow PTO procedures.

Specifically, in response to an Amended Appeal Brief filed on November 26, 2008, the Examiner levied a requirement insisting that the claims which had been canceled during prosecution be listed in the Appeal Appendix, a requirement directly contradictory to the requirements set forth in MPEP 1205.02. The Appellants attempted to comply with the Examiner’s requirement without violating the explicit edict of MPEP 1205.02 by submitting an appendix on April 6, 2009 which included claim numbers of each of the canceled claims without any wording or status identifiers. In response, the Examiner reopened prosecution alleging that a request for continued examination under 37 CFR 1.114 (hereinafter “RCE”) had been filed *and paid for*, and that the paper of April 6, 2009 had been “entered.” (Office Action dated October 5, 2009 at page 2).

A review of the PAIR system reveals that no RCE has been entered. Rather, PAIR shows that the Examiner conducted a new prior art search and “found” U.S. Patent No. 5,609,644 of Ashby et al. (hereinafter “Ashby”), a reference that was previously submitted by the Appellants on March 31, 2004 and previously considered by the Examiner on April 28, 2007 (See Office Action dated May 4, 2007).

On April 1, 2010, the Appellants submitted a second Appeal Brief identifying the foregoing situation. Subsequently, the Examiner failed to acknowledge the Appeal Brief or advise the Applicants of the status of the previously filed amendments in the Office Action. Furthermore, the Examiner again failed to comply with the requirements of

section 1207.04 of the MPEP which states that an “examiner may, *with approval from the supervisory patent examiner*, reopen prosecution to enter a new ground of rejection after appellant’s brief or reply brief has been filed.” (The MPEP also provides form paragraph 12.187 which may be used when reopening prosecution.) No such verbiage is provided within the Office Action. Thus, while the Office Action is signed by the Supervisory Patent Examiner, there is no record of the Supervisory Examiner authorizing re-opening of prosecution.

Accordingly, while the failure of the Examiner to follow PTO procedures has clouded the issue, the Appellants believe that the Amendment dated January 28, 2008 sets forth the precise wording of the claims appealed herein.

(5) SUMMARY OF CLAIMED SUBJECT MATTER

The present invention relates to a sliding patellar prosthetic device. (See, e.g. Appellants’ specification at Abstract). With reference to FIG. 15, a base 60 includes a boss 62 and spin stop 64. (See, e.g. Appellants’ specification at page 16, lines 6-7). The upper surface 66 of the base 60 is spherically curved and a bearing surface 68 of articulating subcomponent 70 shown in FIG. 16 is curved in a complimentary manner so as to lay adjacent to upper surface 66 when articulating subcomponent 70 is assembled onto base 60. (See, e.g. Appellants’ specification at page 16, lines 7-10). Accordingly, as boss 62 moves along the length of channel 72, a rotational movement is realized, with articulating subcomponent 70 rotating about the Y-axis. (See, e.g. Appellants’ specification at page 16, lines 11-13). Additionally, articulating subcomponent 70 may spin about the Z-axis, as limited by spin stop 64 and the structure defining spin stop

receiving chamber 82 in the same manner as discussed above. (See, e.g. Appellants' specification at page 16, lines 13-16).

Additionally, a third degree of rotation is possible about the X-axis. This is accomplished by providing channel 72 with a width that is wider than the diameter of head 74 of boss 62, along with providing an opening from channel 72 to bearing surface 68 that is wider than the width of stem 76 of boss 62. (See, e.g. Appellants' specification at page 16, lines 23-25). Accordingly, relative motion of boss 62 from side to side within channel 72 is allowed. (See, e.g. Appellants' specification at page 16, lines 23-25). Therefore, because boss 62 is dome shaped, upper surface 66 is curved along the Y-axis and movement of boss 62 from side to side within channel 72 is rotation about the X-axis. (See, e.g. Appellants' specification at page 16, lines 27-29). Of course, head 74 must remain wider than the opening from channel 72 to bearing surface 68 to ensure head 74 is retained within channel 72. (See, e.g. Appellants' specification at page 16, line 29 through page 17, line 2).

Referring again to FIG. 16, articulating subcomponent 70 also includes boss assembly region 78 and spin stop chamber loading region 80 which is in communication with spin stop receiving chamber 82. (See, e.g. Appellants' specification at page 17, lines 3-5). Boss assembly region 78 is used to assemble articulating subcomponent 70 to boss 62. (See, e.g. Appellants' specification at page 17, lines 5-6). Because boss assembly region 78 is offset from channel 72, the possibility of accidental disassembly of articulating subcomponent 70 from base 60 is reduced. (See, e.g. Appellants' specification at page 17, lines 6-8). Accidental disassembly is further reduced as a result

of the design of spin stop chamber loading region 80 which is very narrow and tortuous.
(See, e.g. Appellants' specification at page 17, lines 8-10).

The additional information required by the United States Patent Office is as follows. Claims 1, 31, 42, 48, and 51 are independent claims.

Claim 1

Claim 1 recites:

A patellar prosthesis comprising (see, e.g., Appellants' specification at Abstract):

a first subcomponent (see, e.g. Appellants' specification at page 16, lines 6-7 and FIG. 15 reference number 60);

a boss operably connected to the first subcomponent (see, e.g. Appellants' specification at page 16, lines 6-7 and FIG. 15 reference number 62); and

a second subcomponent movably connected to the first subcomponent with the boss (see, e.g. Appellants' specification at page 16, lines 23-25 and FIG. 16 reference number 70), the second subcomponent comprising,

a first side, the first side having (i) a channel therein (see, e.g. Appellants' specification at page 16, lines 23-25 and FIG. 16 reference number 72), (ii) a boss retaining region operable to retain the boss within the channel when the boss is inserted into the channel by contacting the boss (see, e.g. Appellants' specification at page 16, lines 23-25 and FIG. 16, page 19, lines 3-8 and reference number 116 of FIG. 22), and (iii) a boss assembly region operable to facilitate the insertion of the boss into the channel, by allowing the boss to pass through the boss assembly region for insertion of

the boss into the channel (see, e.g. Appellants' specification at page 17, lines 5-6 and FIG. 16 reference number 78).

Claim 31

Claim 31 recites:

A patellar replacement component base comprising (see, e.g., Appellants' specification at Abstract):

a generally planar bone contacting surface lying in a first plane (see, e.g. Appellants' specification at page 16, lines 6-7 and FIG. 15);

a dome shaped contact surface for contacting a patellar articulating component and located generally opposite the bone contacting surface (see, e.g. Appellants' specification at page 16, lines 6-7 and FIG. 15 reference number 66); and

a boss having a stem extending from the dome shaped articulating component contact surface along an axis, the axis of the stem intersecting the bone contacting surface plane at an angle of other than 90 degrees (see, e.g. Appellants' specification at page 16, lines 6-7 and FIG. 15 reference numbers 62 and 76).

Claim 42

Claim 42 recites:

A patellar prosthesis comprising (see, e.g., Appellants' specification at Abstract):

a first subcomponent (see, e.g. Appellants' specification at page 16, lines 6-7 and FIG. 15 reference number 60);

a boss operably connected to the first subcomponent (see, e.g. Appellants' specification at page 16, lines 6-7 and FIG. 15 reference number 62); and

a second subcomponent movably connected to the first subcomponent with the boss (see, e.g. Appellants' specification at page 16, lines 23-25 and FIG. 16 reference number 70), the second subcomponent comprising,

a first side, the first side having (i) a channel therein (see, e.g. Appellants' specification at page 16, lines 23-25 and FIG. 16 reference number 72), (ii) a boss retaining region having a first configuration operable to retain the boss within the channel when the boss is inserted into the channel by contacting the boss (see, e.g. Appellants' specification at page 16, lines 23-25 and FIG. 16, page 19, lines 3-8 and reference number 116 of FIG. 22, page 19, lines 17-20 and reference number 122 of FIG. 23, page 20, lines 11-13 and reference number 150 of FIG. 26B, etc.), and (iii) a boss assembly region having a second configuration operable to facilitate the insertion of the boss into the channel, the first configuration and the second configuration being different (see, e.g. Appellants' specification at page 17, lines 5-6 and FIG. 16, page 19, lines 7-9 and reference number 120 of FIG. 20, page 19, lines 21-26 and reference number 130 of FIG. 23, page 20, lines 11-13 and reference number 152 of FIG. 26A, page 21, lines 3-5 and reference number 164 of FIG. 29, etc.).

Claim 48

Claim 48 recites:

A patellar replacement component base comprising (see, e.g., Appellants' specification at Abstract):

a body defining a generally planar bone contacting surface lying in a first plane (see, e.g. Appellants' specification at page 16, lines 6-7 and FIG. 15), a dome shaped articulating component contact surface generally opposite the bone contacting surface (see, e.g. Appellants' specification at page 16, lines 6-7 and FIG. 15 reference number 66);

a stem extending outwardly from the dome shaped articulating component contact surface of said body along a line, the line of the stem intersecting the bone contacting surface plane at an angle of other than 90 degrees (see, e.g. Appellants' specification at page 16, lines 6-7 and FIG. 15 reference numbers 62 and 76); and

a head extending from said stem (see, e.g. Appellants' specification at page 16, lines 6-7 and FIG. 15 reference numbers 62 and 74).

Claim 51

Claim 51 recites:

A patellar replacement component base comprising (see, e.g., Appellants' specification at Abstract):

a integral body defining generally planar bone contacting surface lying in a first plane(see, e.g. Appellants' specification at page 16, lines 6-7 and FIG. 15), a dome shaped contact surface generally opposite the bone contacting surface (see, e.g. Appellants' specification at page 16, lines 6-7 and FIG. 15 reference number 66); and

a stem extending outwardly from the dome shaped contact surface of said body in a direction away from the generally planar bone contacting surface along an axis (see, e.g. Appellants' specification at page 16, lines 6-7 and FIG. 15 reference numbers 62 and 76),

the axis of the stem intersecting the bone contacting surface plane at an angle of other than 90 degrees (see, e.g. Appellants' specification at page 16, lines 6-7 and FIG. 15), the stem being integral with said body(see, e.g. Appellants' specification at page 16, lines 6-7 and FIG. 15).

(6) GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 1-3, 10, 31, 38, 39, 42-45, 47-49, 51 and 52 stand rejected as being anticipated under 35 U.S.C. §102(b) by Ashby.

Claims 13, 14, 40, 41 and 46 stand rejected under 35 U.S.C. §103(a) as being obvious over Ashby.

Claims 50 and 53 stand rejected under 35 U.S.C. §103(a) as being obvious over Ashby in view of U.S. Patent No. 5,019,104 issued to Whiteside et al. (hereinafter "Whiteside").

(7) ARGUMENT

Claims 1-3, 10, 31, 38, 39, 42-45, 47-49, 51 and 52 Are Not Anticipated by Ashby

Claims 1-3, 10, 31, 38, 39, 42-45, 47-49, 51 and 52 stand rejected under 35 U.S.C. §102(b) as being anticipated by Ashby. (Office Action at page 2). Ashby does not teach or disclose each element of the claims. Therefore, the rejections should be overturned.

Discussion re: Patentability of Claim 1

1. Claim 1

Claim 1 recites the following:

A patellar prosthesis comprising:
 a first subcomponent;
 a boss operably connected to the first subcomponent; and
 a second subcomponent movably connected to the first subcomponent with the boss, the second subcomponent comprising,
 a first side, the first side having (i) a channel therein, (ii) a boss retaining region operable to retain the boss within the channel when the boss is inserted into the channel by contacting the boss, and (iii) a boss assembly region operable to facilitate the insertion of the boss into the channel, by allowing the boss to pass through the boss assembly region for insertion of the boss into the channel.

Claim 1 thus recites a subcomponent of a patellar prosthesis that includes a boss-receiving channel and a “boss assembly region” “through” which the boss moves into the channel.

2. The Examiner has Failed to Identify Each Element of Claim 1

The Examiner has alleged that the undercut 18 of Ashby is a boss retaining region and that an arbitrarily identified area of the slot 17 is a “boss assembly region”. (Office Action at page 2). The Examiner has failed to identify each element of claim 1 in the device of Ashby.

Specifically, the Examiner has alleged that the “left side of element 17” is a boss assembly region. (Office Action at page 2). The Examiner has also alleged, however, that the slot 17 is the “channel.” (Office Action at page 2). A single component cannot be both a channel and a separate element which facilitates entry of a boss into itself. Moreover, the Examiner has failed to identify anything about the “left side of the channel 17” which is different from any other portion of the channel 17 such that one could

reasonably conclude that the left side of the channel 17 facilitates entry of a boss into the channel 17. Thus, the slot 17 of Ashby cannot be both a channel and a component which is operable to facilitate entry of a boss into the channel.

It is axiomatic that anticipation of a claim under 35 U.S.C. § 102 is proper only if the prior art reference discloses each and every element of the claim. Merely renaming arbitrarily identified areas of the slot of Ashby is not sufficient to make a showing of anticipation. Rather, anticipation requires each element of the claim to be identified in the prior art. Therefore, because the Examiner has failed to identify any component of Ashby which is configured to facilitate entry of a boss into the slot 17, claim 1 is not anticipated by the device of Ashby.

3. The Examiner has Mischaracterized Ashby

Moreover, the Examiner has mischaracterized the manner in which the device of Ashby is assembled. The Examiner has alleged that the boss of Ashby is allowed to “pass through the [left side of the channel 17] for insertion of the boss into the channel” with reference to column 3, lines 35-46 of Ashby. (Office Action at page 3). The Examiner has failed to explain how one solid (the boss) can pass through another solid (the side of the channel).

Additionally, the alleged passage of one solid through another solid is explicitly contradicted by the disclosure of Ashby. Immediately *following* the passage cited by the Examiner, Ashby explains the actual manner in which the device is assembled. Thus, at column 3, lines 48-52 Ashby states that “[t]he dimensions of the slot 17 and the peg 7 are arranged so that the enlarged end of the peg can be inserted into the slot 17 and when

rotated, the extensions 9 engage within the re-entrant undercut 18 to hold the parts together.” Thus, Ashby does not disclose passage of a boss “through” the left side of the slot 17 as alleged by the Examiner.

4. Conclusion

It is axiomatic that anticipation of a claim under 35 U.S.C. § 102 is proper only if the prior art reference discloses each and every element of the claim. Since Ashby does not disclose each element of the Appellants’ claim 1, for any or all of the foregoing reasons, Ashby does not anticipate Appellants’ claim 1. Accordingly, the Board of Appeals is respectfully requested to overturn the rejection of claim 1.

Discussion Re: Patentability of Claims 2-3, and 10

Each of claims 2-3, and 10 depend from claim 1 and include the limitations discussed above with respect to claim 1 and additional limitations. Therefore, for at least the same reasons set forth with respect to claim 1, claims 2-3, and 10 are patentable over Ashby.

Discussion re: Patentability of Claim 31

1. Claim 31

Claim 31 recites:

A patellar replacement component base comprising:
 a generally planar bone contacting surface lying in a first plane;
 a dome shaped contact surface for contacting a patellar articulating component
 and located generally opposite the bone contacting surface; and
 a boss having a stem extending from the dome shaped articulating component
 contact surface along an axis, the axis of the stem intersecting the bone contacting surface
 plane at an angle of other than 90 degrees.

Accordingly, a patellar base includes a generally flat bone contacting surface on one side thereof and a domed shaped surface configured to contact a patellar articulating component on the opposite side. Additionally, a stem extends outwardly from the dome shaped surface along an axis which intersects the plane of the bone contacting surface at an angle of other than 90 degrees.

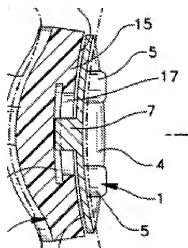
2. The Convex Dish of Ashby is Not Both Planar and Domed

The Examiner has alleged that Ashby discloses a component with a planar bone contacting surface and a domed opposite surface. The Examiner has further stated that the term “generally planar” will be interpreted to mean “that the surface *generally* lies in one plane.” (Office Action at page 8.) The Examiner has mischaracterized Ashby and misapplied the term “generally planar”.

Specifically, the Examiner identifies the component of FIGs. 1-3 of Ashby as a base component, with a “generally planar bone contacting surface (4)” and a “dome shaped contact surface (2)” opposite the bone contacting surface. (Office Action at page 3). Ashby discloses, however, that the component identified by reference number 2 is a “convex dish.” (Ashby at column 3, lines 20-23). As evidenced by FIG. 6, the front face 4 and the posterior face 6 (the surface opposite to the front face 4) of the convex dish 2 are *identically* shaped. Ashby further discloses that “the front face 4 of the dish 2 is concave” (Ashby at column 3, lines 25-26) and that a substantially spherical concave bearing surface engages “the substantially spherical posterior convex bearing surface 6” (Ashby at column 3, lines 39-43). These two surfaces, which are identically shaped, cannot be both planar and domed. The two terms are mutually exclusive.

Moreover, Ashby explicitly states that the front face 4 (Ashby's bone contacting surface) is "concave." (Ashby at column 3, lines 25-26). The term "concave" means "curved like the inner surface of a sphere." *The American Heritage Stedman's Medical Dictionary*, Houghton Mifflin Company, 2002. Therefore, by definition, a concave surface is not a planar surface, even if the term "generally planar" is interpreted to mean that a surface lies *generally* in one plane.

In the Office Action the Examiner further argued that "Figure 6 of the Ashby et al. reference shows that the central section of the lower surface, element 4, has a generally planar configuration." (Office Action at page 8). The Examiner then alleged that "[t]he peripheral sections of the element 4 are curved downward..." (Office Action at page 8). FIG. 6 of Ashby is set forth below:



After a careful review of FIG. 6 of Ashby, even under extremely high magnification, the Appellants have not been able to identify any incongruity in the curve of the surface 4. Therefore, even if the figures could be relied upon for showing relative

curved/flat areas, there is no basis for the Examiner's assertion of a "flat" portion in the center of the surface 4.

It is axiomatic that anticipation of a claim under 35 U.S.C. § 102 is proper only if the prior art reference discloses each and every element of the claim. Since the posterior face 6 is convex and the surface 4 appears to be *identically* shaped, the opposite sides of Ashby's convex dish 2 cannot be both planar and domed. Therefore, Ashby does not anticipate Appellants' claim 31. Accordingly, the Board of Appeals is respectfully requested to overturn the rejection of claim 31.

3. The Device of Ashby Is Not Configured in the Manner Required by the Claim

Moreover, claim 31 recites "the axis of the stem intersecting the bone contacting surface plane at an angle of other than 90 degrees." The Examiner cites to FIGs. 1-3 of Ashby as disclosing this arrangement. (Office Action at page 3). FIG. 2 of Ashby, however, depicts a plan view of the convex dish 2 wherein the bone contacting surface 4 is clearly curved. Thus, there is no "bone contacting surface plane." To the extent any such plane could be approximated, the axis of peg 7 appears to intersect such a plane at exactly 90 degrees. Furthermore, a plane tangent to the curved bone surface 4 at the intersection of the axis of the peg 7 and the bone contacting surface 4 also appears to be exactly ninety degrees (see, e.g., FIG. 6). Nothing in Ashby teaches to the contrary.

Therefore, to the extent Ashby discloses anything about the orientation of the peg 7 with the bone contacting surface 4, such disclosure is of a peg that is oriented with an axis at exactly 90 degrees with respect to a plane defined by the bone contacting surface. A stem which extends outwardly from the dome shaped surface along an axis which

intersects the plane of the bone contacting surface at an angle of 90 degrees is not the same as a stem which extends outwardly from the dome shaped surface along an axis which intersects the plane of the bone contacting surface at an angle of other than 90 degrees. Therefore, the peg 7 of Ashby is not arranged in the manner required by claim 31.

The Federal Circuit has stated:

Because the Hallmark of anticipation is prior invention, the prior art reference --in order to anticipate under 35 U.S.C. § 102—must not only disclose all elements of the claim within the four corners of the document, but must also disclose those elements “arranged as in the claim.”

Net Moneyin, Inc. v. Verisign, Inc., 88 USPQ2d 1751, 1758, (Fed. Cir. 2008), citing, *Connell v Sears, Roebuck & Co.*, 722 F.2d 1542, 1548, 220 USPQ 193, 198 (Fed. Cir. 1983). The peg 7 is not arranged in the manner required by claim 31. Therefore, Ashby does not anticipate claim 31.

Anticipation under 35 U.S.C. § 102 is proper only if the prior art reference discloses each and every element of the claim. Since Ashby does not disclose all of the elements of claim 31 arranged in the manner required by claim 31, Ashby does not anticipate claim 31.

4. The Stem of Ashby Is Not Configured in the Manner Required by the Claim

In the Office Action, the Examiner alternatively argues that the “stems” 5 of Ashby anticipate the boss recited in claim 31. (Office Action at page 8). The Examiner has mischaracterized the “stems” of Ashby.

Specifically, the Examiner cites to the “stems” 5 of Ashby as depicted in FIG. 6 as having an axis that does not intersect the planar bone contacting surface at an angle of 90

degrees. (Office Action at page 8). Ashby uses the reference number “5” to identify three “bosses 5” which “allow fixation into the patella bone stock.” (Ashby at column 3, lines 25-27. The bosses 5 thus extend from the *bone contacting surface*, not the articulating surface. Claim 31, however, requires the boss to extend “from the dome shaped articulating component contact surface” which is “generally opposite the bone contacting surface.”

A stem which extends outwardly from a bone contacting surface is not the same as a stem which extends outwardly from a dome shaped surface opposite the bone contacting surface. Therefore, the bosses 5 of Ashby are not arranged in the manner required by claim 31.

The Federal Circuit has stated:

Because the Hallmark of anticipation is prior invention, the prior art reference --in order to anticipate under 35 U.S.C. § 102—must not only disclose all elements of the claim within the four corners of the document, but must also disclose those elements “arranged as in the claim.”

Net Moneyin, Inc. v. Verisign, Inc., 88 USPQ2d 1751, 1758, (Fed. Cir. 2008), citing, *Connell v Sears, Roebuck & Co.*, 722 F.2d 1542, 1548, 220 USPQ 193, 198 (Fed. Cir. 1983). The bosses 5 are not arranged in the manner required by claim 31. Therefore, Ashby does not anticipate claim 31.

Anticipation under 35 U.S.C. § 102 is proper only if the prior art reference discloses each and every element of the claim. Since Ashby does not disclose all of the elements of claim 31 arranged in the manner required by claim 31, Ashby does not anticipate claim 31.

5. Conclusion

For any or all of the above reasons, the Board of Appeals is respectfully requested to overturn the rejection of claim 31.

Discussion Re: Patentability of Claim 38

1. Claim 38

Claim 38 recites:

The patellar replacement component base of claim 31, further comprising:
a spin stop extending from the dome shaped contact surface along an axis, the axis of the spin stop intersecting the bone contacting surface plane at an angle of other than 90 degrees.

Claim 38 thus requires two different components to extend outwardly from the dome shaped surface along axes which intersect the plane of the bone contacting surface at an angle of other than 90 degrees.

2. Argument of Claim 31 Applies

As an initial matter, claim 38 depends from claim 31 and includes all of the limitations of claim 31. The Examiner rejected claim 38 based upon the same art discussed above with respect to claim 31. Accordingly, for the same reasons set forth above with respect to claim 31, claim 38 is patentable over Ashby.

3. The Device of Ashby Is Not Configured in the Manner Required by the Claim

Moreover, claim 38 recites “the axis of the of the spin stop intersecting the bone contacting surface plane at an angle of other than 90 degrees.” The Examiner cites to FIG. 1 of Ashby as disclosing this arrangement. (Office Action at page 3-4). FIG. 1 of

Ashby, however, depicts a top plan view of the convex dish 2. Accordingly, the axis of the pin 20 with respect to the bone contacting surface 4 cannot be ascertained.

Consequently, there is no basis in the disclosure of Ashby for the Examiner's conclusion that the pin 20 has an axis that intersects a bone contacting surface plane at an angle of other than 90 degrees.

Thus, the Examiner has failed to identify any explicit teaching as to the angle of the Ashby spin stop axis with respect to any surface. In the absence of any express disclosure of an element, MPEP § 2112 requires the Examiner to provide rationale or evidence tending to show inherency. To establish inherency, the extrinsic evidence must show that the missing descriptive matter is "necessarily present". (MPEP § 2112). The Examiner has failed to cite to any evidence or to provide any rationale to establish that every spin stop 20 necessarily has an axis that intersects a bone contacting surface plane at an angle of other than 90 degrees.

Therefore, because Ashby does not disclose that the pin 20 has an axis that intersects a bone contacting surface plane at an angle of other than 90 degrees, and because the Examiner has failed to establish that the pin 20 inherently includes an axis that intersects a bone contacting surface plane at an angle of other than 90 degrees, the Examiner has failed to establish *prima facie* anticipation.

4. The Examiner has Misconstrued the Claim

In the Office Action, the Examiner alternatively argues that the FIG. 2 of Ashby discloses the spin stop recited in Claim 38. (Office Action at page 8). The Examiner has mischaracterized the claim.

Specifically, the Examiner cites to FIG. 2 of Ashby and argues that since the “top of element 1 is curved... the spin stop will not intersect surface (2) at 90 degrees.” (Office Action at page 8). FIG. 2 of Ashby is a top plan view and fails to identify the orientation of the pin 20. Moreover, Ashby simply notes that the pin 20 “protrudes from the convex bearing surface 6” and “extends into the second slot 19.” (Ashby at column 4, lines 14-21). Therefore, the axis of the pin 20 is not explicitly described by Ashby.

Therefore, because the axis of the pin 20 is not specifically disclosed, MPEP § 2112 requires the Examiner to provide rationale or evidence tending to show inherency. Moreover, “[t]o establish inherency, the extrinsic evidence ‘must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.’” *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted). Accordingly, for Ashby to inherently disclose an axis that intersects the bone contacting surface at an angle other than 90 degrees, every possible orientation of the pin 20 must necessarily result in an axis that intersects the bone contacting surface at an angle other than 90 degrees. The Examiner has failed, however, to establish that every possible orientation of the pin 20 must necessarily result in an axis that intersects the bone contacting surface at an angle other than 90 degrees.

Moreover, an orientation that results in an axis that intersects the bone contacting surface at an angle of 90 degrees is simple to make. For example, assuming the bottom surface to be planar as alleged by the Examiner, the bosses 5 each have an axis that

intersects the front face 4 at 90 degrees. (See, e.g., FIG. 6 above). Thus, constructing a spin stop with the same orientation of the bosses 5 but which extends from the surface 6 of the dish 2, results in a spin stop with an axis that intersects the bone contacting surface at an angle of 90 degrees.

Since an axis that intersects the bone contacting surface at an angle other than 90 degrees is not a necessary property of a spin stop, a spin stop with an axis that intersects the bone contacting surface at an angle other than 90 degrees is not inherent to the device of Ashby. Consequently, the Examiner has failed to provide evidence or rationale tending to show inherency as required by MPEP § 2112. Therefore, Ashby does not disclose a spin stop with an axis that intersects the bone contacting surface at an angle other than 90 degrees as required by claim 38. Accordingly, the Board of Appeals is respectfully requested to reverse this rejection of claim 38.

5. Conclusion

For any or all of the above reasons, the Board of Appeals is respectfully requested to overturn the rejection of claim 38.

Discussion Re: Patentability of Claim 39

Claim 39 depends from claim 38 and includes the limitations discussed above with respect to claim 38 and additional limitations. Therefore, for at least the same reasons set forth with respect to claim 38, claim 39 is patentable over Ashby.

Discussion re: Patentability of Claim 42

1. Claim 42

Claim 42 recites the following:

A patellar prosthesis comprising:

a first subcomponent;

a boss operably connected to the first subcomponent; and

a second subcomponent movably connected to the first subcomponent with the

boss, the second subcomponent comprising,

a first side, the first side having (i) a channel therein, (ii) a boss

retaining region having a first configuration operable to retain the boss within the

channel when the boss is inserted into the channel by contacting the boss, and

(iii) a boss assembly region having a second configuration operable to facilitate

the insertion of the boss into the channel, the first configuration and the second

configuration being different.

Accordingly, claim 42 is similar to claim 1. Claim 42 differs from claim 1 in that

1) the boss assembly region of claim 42 is not limited to a region “through” which the boss moves, and 2) claim 42 recites the boss retaining region and boss assembly regions as having different configurations.

2. The Arguments of Claim 1 Apply

Notwithstanding the different limitations of claim 42, the Examiner rejected claim 42 based upon the same allegations described above with respect to claim 1 except no assertion was made regarding the ability of the boss to pass through the side of the slot 17. (Office Action at page 4).

Therefore, claim 42 is patentable over Ashby based upon the same arguments as those set forth above with respect to claim 1, as applied to the elements of claim 42, except for the discussion of the alleged ability of the peg of Ashby to pass through the side of the slot 17.

3. Conclusion

It is axiomatic that anticipation of a claim under 35 U.S.C. § 102 is proper only if the prior art reference discloses each and every element of the claim. Since Ashby does not disclose the different configurations of a boss assembly region and a boss retaining region as recited in claim 42 for any or all of the foregoing reasons, Ashby does not anticipate Appellants' claim 42. Accordingly, the Board of Appeals is respectfully requested to overturn the rejection of claim 42.

Discussion re: Patentability of Claims 43-45

Claims 43-45 depend from claim 42 and incorporate all the limitations of claim 42. Accordingly, claims 43-45 are patentable over the prior art for at least the same reasons as those set forth above in connection with claim 42 and the Board of Appeals is respectfully requested to overturn the rejection of claims 43-45.

Discussion re: Patentability of Claim 47

1. Claim 47

Claim 47 recites:

The patellar prosthesis of claim 46, further comprising:
 a spin stop operably connected to the first subcomponent, and wherein the second subcomponent further comprises:
 a spin stop receiving chamber with a loading region, the loading region of the spin stop chamber configured such that when the boss is being inserted into the channel through the boss assembly region, the spin stop is inserted into the spin stop chamber loading region.

Accordingly, claim 47 recites a loading region in a spin stop chamber is configured such that the spin stop moves into the receiving chamber simultaneously with insertion of the boss into the channel.

2. Argument of Claim 42 Applies

As an initial matter, claim 47 depends from claim 42 by way of claim 46 and includes all of the limitations of claim 42. The Examiner rejected claim 47 based upon the same prior art discussed above with respect to claim 42. Accordingly, for the same reasons set forth above with respect to claim 42, claim 47 is patentable over Ashby.

3. Claim 47 Depends from Claim 46 Which is Not Anticipated

Furthermore, the Examiner has admitted that Ashby does not disclose “the boss assembly region being offset from the channel” as required by claim 46. (Office Action page 6). Therefore, because claim 47 depends from claim 46, and thus includes all of the limitations found in claim 46, and because claim 46 is admitted by the Examiner not to be anticipated by Ashby, claim 47 cannot be anticipated by Ashby. Accordingly, Ashby does not anticipate claim 47.

4. Ashby’s Device is Not Arranged for Simultaneous Assembly

Claim 47 requires an arrangement of components that results in the spin stop being inserted into the spin stop chamber loading region simultaneously with the insertion of the boss into the channel. The Examiner has alleged that the structural relationship required by claim 47 is disclosed by Ashby with reference to FIG. 8. (Office Action at

page 5). However, even if, as the Examiner alleged, some portion of the slot 19 was a spin stop chamber loading region, the resulting configuration would be expressly contrary to the explicit teaching of Ashby.

Specifically, Ashby states at column 3, lines 48-52 that “[t]he dimensions of the slot 17 and the peg 7 are arranged so that the enlarged end of the peg can be inserted into the slot 17 and when rotated, the extensions 9 engage with the re-entrant undercut 18 to hold the parts together.” Thus, during assembly, when the peg 7 is inserted into the slot 17, the pin 20 of Ashby is located either directly to the right of the peg 7 or directly to the left of the peg 7 as those components are depicted in FIG. 8 of Ashby. Rotation of the mobile bearing component 10 *after* the peg is inserted into the slot 17 then brings the pin 20 into alignment with the slot 19. Thus, as the peg 7 is positioned into slot 17, the pin is located either directly to the left or directly to the right of the peg 7 as viewed in FIG. 8. As is evident from FIG. 8, there is no component to the left or the right of the slit 17 that could be construed to receive the pin 20 simultaneously as the peg 7 is received into the channel 17.

The Examiner has failed to provide any insight as to why one of ordinary skill in the art would disregard the explicit teaching of Ashby and conclude that the configuration of Ashby allows for simultaneous insertion of the spin stop and the stem. There is no hint of such a configuration in the specification. Moreover, to the extent they can be relied upon, the drawings of Ashby indicate that it would be impossible to assemble the device while simultaneously inserting the pin 20 and the peg 7. Specifically, FIG. 7 shows a tight fit between the extensions 9 of the peg 7 and the undercut 18 and a very wide lip (the portion of component 10 between the undercut 18 and the surface 16). Thus, the lip

could not be moved sufficiently to allow the extensions 9 to pass by the lip and into the undercut.

The Federal Circuit has stated:

Because the Hallmark of anticipation is prior invention, the prior art reference – in order to anticipate under 35 U.S.C. § 102 – must not only disclose all elements of the claim within the four corners of the document, but must also disclose those elements “arranged as in the claim.”

Net Moneyin, Inc. v. Verisign, Inc., 88 USPQ2d 1751, 1758 (Fed. Cir. 2008), citing, *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548, 220 USPQ 193, 198 (Fed. Cir. 1983). Neither the slot 19 nor any other component of Ashby receives the pin 20 as the peg 7 is inserted into the slot 17. Therefore Ashby does not anticipate claim 47.

5. Conclusion

It is axiomatic that anticipation of a claim under 35 U.S.C. § 102 is proper only if the prior art reference discloses each and every element of the claim. Since Ashby does not disclose each element of the Appellants’ claim 47, for any or all of the foregoing reasons, Ashby does not anticipate Appellants’ claim 47. Accordingly, the Board of Appeals is respectfully requested to overturn the rejection of claim 47.

Discussion re: Patentability of Claim 48

Claim 48 recites:

A patellar replacement component base comprising:

a body defining a generally planar bone contacting surface lying in a first plane, a dome shaped articulating component contact surface generally opposite the bone contacting surface;

a stem extending outwardly from the dome shaped articulating component contact surface of said body along a line, the line of the stem intersecting the bone contacting surface plane at an angle of other than 90 degrees; and

a head extending from said stem.

For purposes of this appeal, claim 48 thus recites the same limitations discussed above with respect to claim 31. The Examiner rejected claim 48 based upon the same prior art discussed above with respect to claim 31. (Office Action at pages 3 and 5). Accordingly, claim 48 is patentable over the prior art for at least the same reasons set forth above in connection with the patentability of claim 31 and the Board of Appeals is respectfully requested to overturn the rejection of claim 48.

Discussion re: Patentability of Claim 49

Claim 49 depends from claim 48 and incorporates all the limitations of claim 48. Accordingly, claim 49 is patentable over the prior art for at least the same reasons as those set forth above in connection with claim 48 and the Board of Appeals is respectfully requested to overturn the rejection of claim 49.

Discussion re: Patentability of Claim 51

Claim 51 recites:

A patellar replacement component base comprising:
a integral body defining generally planar bone contacting surface lying in a first plane, a dome shaped contact surface generally opposite the bone contacting surface; and
a stem extending outwardly from the dome shaped contact surface of said body in a direction away from the generally planar bone contacting surface along an axis, the axis of the stem intersecting the bone contacting surface plane at an angle of other than 90 degrees, the stem being integral with said body.

For purposes of this appeal, claim 51 thus recites at least the same limitations discussed above with respect to claim 31. The Examiner rejected claim 51 based upon the same prior art discussed above with respect to claim 31. (Office Action at pages 3

and 6). Accordingly, claim 51 is patentable over the prior art for at least the same reasons set forth above in connection with the patentability of claim 31 and the Board of Appeals is respectfully requested to overturn the rejection of claim 51.

Discussion re: Patentability of Claim 52

Claim 52 depends from claim 51 and incorporates all the limitations of claim 51. Accordingly, claim 52 is patentable over the prior art for at least the same reasons as those set forth above in connection with claim 51 and the Board of Appeals is respectfully requested to overturn the rejection of claim 52.

Claims 13, 14, 40, 41 and 46 Are Not Obvious over Ashby

Claims 13, 14, 40, 41 and 46 stand rejected under 35 U.S.C. §103(a) as being obvious over Ashby. (Office Action at page 6). The proposed modifications do not arrive at the invention claimed. Therefore, the rejections should be overturned.

Discussion Re: Patentability of Claim 13

1. Claim 13

Claim 13 recites the following:

The patellar prosthesis of claim 1, wherein the boss assembly region is offset from the channel.

Accordingly, claim 13 recites a displacement of the boss assembly region with respect to the channel.

2. Claim 13 Depends From Patentable Claim 1

Claim 13 depends from claim 1 and includes all of the limitations of claim 1. The Examiner rejected claim 13 based upon the same prior art discussed above with respect to claim 1. (Office Action at page 6-7). Accordingly, even if Ashby is modified in the manner suggested by the Examiner, such modification fails to correct the deficiencies of Ashby with respect to the elements of claim 1 as discussed above and claim 13 is patentable over the proposed modification of Ashby for the same reasons set forth above with respect to claim 1.

3. Rationale for Obviousness Has Not Been Clearly Articulated

The Examiner has acknowledged that Ashby fails to disclose all of the limitations found in claim 13. (Office Action at page 6-7). The Examiner has alleged that it would be obvious, however, to modify the device of Ashby to arrive at the invention of claim 13. (Office Action at page 6-7). The Examiner has failed to clearly articulate the reasons for obviousness.

The Examiner states that it would have been obvious to one having ordinary skill in the art to construct the boss assembly region being offset from the channel alleging that such a modification would involve a mere change in the shape and/or size of these components and a change in shape is generally recognized as being within the level of ordinary skill in the art. (Office Action at page 7). An “offset”, however, is not a “size” or a “shape”. Rather, an “offset” is an *orientation*. The Examiner has failed to explain how changing a size or shape is germane to achieving an offset.

MPEP 2142 notes that “[t]he key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007) noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit.” Because the Examiner has failed to provide a clear articulation explaining how changing the size or shape of elements is germane to changing the orientation of the elements, the Examiner has failed to clearly articulate reasons for obviousness. Thus, a *prima facie* case of obviousness has not been established with respect to claim 13.

4. Conclusion

Claim 13 depends from claim 1 and should be patentable for the reasons discussed above with regards to claim 1. Moreover, not only would it not have been obvious to modify the prior art in a manner which would arrive at the limitations of claim 13, but the modifications suggested by the Examiner would not arrive at the embodiment required by claim 13. Accordingly, for any or all of the foregoing reasons, the Board of Appeals is respectfully requested to overturn the rejection of claim 13.

Discussion Re: Patentability of Claim 14

1. Claim 14

Claim 14 recites the following:

The patellar prosthesis of claim 13, further comprising:
 a spin stop operably connected to the first subcomponent, and wherein the second subcomponent further comprises:
 a spin stop receiving chamber with a loading region, the loading region of the spin stop chamber configured such that when the boss is being inserted into the channel

through the boss assembly region, the spin stop is inserted into the spin stop chamber loading region.

Accordingly, claim 14 recites 1) a spin stop chamber loading region, which is 2) specifically positioned such that as the boss enters the channel, the spin stop simultaneously enters the spin stop chamber loading region.

2. Argument of Claim 13 Applies

Claim 14 depends from claim 13 and includes all of the limitations of claim 13. The Examiner rejected claim 14 based upon the same prior art discussed above with respect to claim 13. (Office Action at page 7). Accordingly, even if Ashby is modified in the manner suggested by the Examiner, such modification fails to correct the deficiencies of Ashby with respect to the elements of claim 13 as discussed above and claim 14 is patentable over the proposed modification of Ashby for the same reasons set forth above with respect to claim 13.

3. Rationale for Obviousness Has Not Been Clearly Articulated

Additionally, while the Examiner has alleged that the slot 19 of Ashby is a spin stop receiving chamber and the left side of the slot 19 of Ashby is a spin stop chamber loading region (Office Action at page 7), the Examiner has failed to identify any configuration of Ashby which permits loading of the spin stop in the spin stop chamber loading region simultaneously with positioning of the boss into the channel. (See, e.g., discussion of patentability of claim 42).

When making a rejection under 35 U.S.C. §103, MPEP §2142 requires a “clear articulation of the reason(s) why the claimed invention would have been obvious.” This

requirement derives from the Supreme Court decision in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007) which noted that the analysis supporting a rejection under 35 U.S.C. §103 should be made explicit. The Examiner has failed to make a *prima facie* case for a rejection under 35 U.S.C. §103 because the Examiner does not provide a clear articulation of why it would be obvious to modify Ashby such that the boss enters the channel and the spin stop enters the spin stop chamber loading region simultaneously as required by claim 14.

4. Modification of Ashby Would Render the Device Non-Functional

To the extent that the Examiner intended to allege that it would be obvious to modify Ashby such that the peg 7 enters the slot 17 simultaneously as the pin 20 enters the slot 19, such allegation would be expressly contrary to the explicit teaching of Ashby. As discussed above, at column 3, lines 48-52 Ashby states that “[t]he dimensions of the slot 17 and the peg 7 are arranged so that the enlarged end of the peg can be inserted into the slot 17 and when rotated, the extensions 9 engage within the re-entrant undercut 18 to hold the parts together.” Thus, during assembly, when the peg 7 is inserted into the slot 17, the pin 20 of Ashby is located either directly to the right of the peg 7 or directly to the left of the peg 7 as those component are depicted in FIG. 8 of Ashby. Rotation of the mobile bearing component 10 *after* the peg is inserted into the slot 17 then brings the pin 20 into alignment with the slot 19. Thus, as the peg 7 is positioned into slot 17, the pin 20 is located either directly to the left or directly to the right of the peg 7 as viewed in FIG. 8. As is evident from FIG. 8, there is no component to the left or the right of the slot 17 that could be construed to receive the pin 20 as the peg 7 is received into the channel 17.

Furthermore, Ashby states at column 4, lines 14-21 that limitation of rotational movement is achieved by the extension of pin 20 into second slot 19. The shape of the second slot 19 is thus designed to limit the rotation by retaining the pin 20 within a certain area. As such, it would be counter to the purpose of Ashby to elongate the shape of the second slot 19 to allow the pin 20 to be inserted into the second slot 19 at the same time as the peg 7 is inserted into the slot 17 because this would also allow the pin to be rotated 90 degrees within the second slot even after the peg 7 has been positioned in the channel.

The proposed modification would thus render the device of Ashby non-functional because it would eliminate the feature which limits the rotational movement of pin 20 in second slot 19. As such it would not have been obvious to one having ordinary skill in the art at the time the invention was made to ignore the explicit purpose of the structure of Ashby and instead modify Ashby to construct the spin stop receiving chamber as stated in claim 14, thereby rendering it non-functional.

5. Conclusion

The Examiner fails to make a *prima facie* case of obviousness with respect to claim 14. Furthermore, claim 14 would not be obvious to one having ordinary skill in the art. Therefore, for any and all of the reasons discussed above, claim 14 is not obvious over Ashby. Accordingly, the Board of Appeals is respectfully requested to overturn the rejection of claim 14.

*Discussion Re: Patentability of Claim 40*1. Claim 40

Claim 40 recites the following:

The patellar replacement component base of claim 38, wherein:
the dome shaped contact surface forms an apex; and
the spin stop and the boss are on opposite sides of the apex when viewed from a side elevational view.

Accordingly, claim 40 recites an apex in the dome shaped contact surface and a spin stop which is specifically positioned on the opposite side of the apex as the boss.

2. Claim 40 Depends From Patentable Claim 38

Claim 40 stands rejected under 35 U.S.C. §103(a) as being obvious over Ashby. (Office Action at page 6-7). Claim 40 depends from claim 38 and includes all of the limitations of claim 38. The Examiner rejected claim 40 based upon the same prior art discussed above with respect to claim 38. Accordingly, even if Ashby is modified to incorporate the boss and spin stop being on opposite sides of the apex, such modification fails to correct the deficiencies of Ashby with respect to the limitations of claim 38. Thus, the proposed modification fails to arrive at the invention of claim 40.

3. Rationale for Obviousness Has Not Been Clearly Articulated

Additionally, the Examiner states that it would be obvious to one of ordinary skill in the art to modify Ashby so that the boss and spin stop were on opposite sides of the apex because such a modification would have involved a mere change in the shape and/or size of these components. However, the location of a boss and spin stop on opposite sides of an apex is a particular spatial relationship between the two elements. Thus,

changing the shape or size of the elements in Ashby will not achieve a different relative location between the elements and will not result in the spatial relationship required by claim 40.

MPEP 2142 notes that “[t]he key to supporting any rejection under 35 U.S.C. 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The Supreme Court in *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1396 (2007) noted that the analysis supporting a rejection under 35 U.S.C. 103 should be made explicit.” Because the Examiner has failed to clearly articulate how changing the size or shape of the elements would result in moving the location of the elements so as to arrive at the embodiment recited in claim 38, a *prima facie* case of obviousness has not been established with respect to claim 40. Accordingly, the Board of Appeals is respectfully requested to overturn the rejection of claim 40.

4. Conclusion

Claim 40 depends from claim 38 and should be patentable for the reasons discussed above with regards to claim 38. Moreover, not only would it not have been obvious to modify the prior art in a manner which would arrive at the limitations of claim 40, but the modifications suggested by the Examiner would not arrive at the embodiment required by claim 40. Accordingly, for any or all of the foregoing reasons, the Board of Appeals is respectfully requested to overturn the rejection of claim 40.

Discussion Re: Patentability of Claim 41

Claim 41 stands rejected under 35 U.S.C. §103(a) as being obvious over Ashby. (Office Action at page 6-7). Claim 41 depends from claim 31 and includes all of the limitations of claim 31. The Examiner rejected claim 41 based upon the same prior art discussed above with respect to claim 31. Accordingly, even if Ashby is modified to incorporate a spherical dome shaped contact surface, such modification fails to correct the deficiencies of Ashby with respect to the limitations of claim 31. Thus, the proposed modification fails to arrive at the invention of claim 41. Accordingly, the Board of Appeals is respectfully requested to overturn the rejection of claim 41.

*Discussion Re: Patentability of Claim 46*1. Claim 46

Claim 46 recites the following:

The patellar prosthesis of claim 42, wherein the boss assembly region is connected to but offset from the channel.

Accordingly, claim 46 recites a displacement of the boss assembly region from the channel wherein the boss assembly region is connected to the channel at an angle.

2. Argument of Claim 42 Applies

Claim 46 depends from claim 42 and includes all of the limitations of claim 42. The Examiner rejected claim 46 based upon the same prior art discussed above with respect to claim 42. (Office Action at page 6-7). Accordingly, even if Ashby is modified in the manner suggested by the Examiner, such modification fails to correct the deficiencies of Ashby with respect to the elements of claim 42 as discussed above and

claim 46 is patentable over the proposed modification of Ashby for the same reasons set forth above with respect to claim 42.

3. Argument of Claim 13 Applies

For purposes of this appeal, claim 46 thus recites the same limitations discussed above with respect to claim 13. The Examiner rejected claim 46 based upon the same prior art discussed above with respect to claim 13. (Office Action at pages 6-7). Accordingly, claim 46 is patentable over the prior art for the same reasons set forth above in connection with the patentability of claim 13 and the Board of Appeals is respectfully requested to overturn the rejection of claim 46.

4. Conclusion

Claim 46 depends from claim 42 and should be patentable for the reasons discussed above with regards to claim 42. Moreover, it would not have been obvious to amend the prior art in a manner which would arrive at the limitations of claim 46 for the reasons discussed above with regards to claim 13. Accordingly, for at least any or all of the foregoing reasons, the Board of Appeals is respectfully requested to overturn the rejection of claim 46.

Claims 50 and 53 Are Not Obvious over Ashby

Claims 50 and 53 stand rejected under 35 U.S.C. §103(a) as being obvious over Ashby in view of Whiteside. (Office Action at page 7). The proposed modification does not arrive at the invention claimed. Therefore, the rejections should be overturned.

Discussion re: Patentability of Claim 50

Claim 50 depends from claim 48 and includes all of the limitations of claim 48. The Examiner rejected claim 50 based upon the same prior art discussed above with respect to claim 48, and modifying the materials used based upon the disclosure of Whiteside. (Office Action at page 7). Accordingly, even if Ashby is modified in the manner suggested by the Examiner, such modification fails to correct the deficiencies of Ashby with respect to the elements of claim 48 as discussed above and claim 50 is patentable over the proposed modification of Ashby for the same reasons set forth above with respect to claim 48.

Discussion re: Patentability of Claim 53

Claim 53 depends from claim 51 and includes all of the limitations of claim 51. The Examiner rejected claim 53 based upon the same prior art discussed above with respect to claim 51, and modifying the materials used based upon the disclosure of Whiteside. (Office Action at page 7). Accordingly, even if Ashby is modified in the manner suggested by the Examiner, such modification fails to correct the deficiencies of Ashby with respect to the elements of claim 51 as discussed above and claim 53 is patentable over the proposed modification of Ashby for the same reasons set forth above with respect to claim 51.

CONCLUSION

Claims 1-3, 10, 31, 38, 39, 42-45, 47-49, 51 and 52 are not anticipated by Ashby, claims 13, 14, 40, 41 and 46 are not obvious over Ashby, and claims 50 and 53 are not obvious over Ashby in view of Whiteside. Accordingly, the Board of Appeals is respectfully requested to overturn the rejection of claims 1-3, 10, 13, 14, 31, and 38-53.

Respectfully submitted,

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(8) CLAIMS APPENDIX

This Appendix is in the form previously required by the Examiner (see Notice of Non-Compliant Appeal Brief dated March 6, 2009).

Claim 1. A patellar prosthesis comprising:

- a first subcomponent;
- a boss operably connected to the first subcomponent; and
- a second subcomponent movably connected to the first subcomponent with the boss, the second subcomponent comprising,
 - a first side, the first side having (i) a channel therein, (ii) a boss retaining region operable to retain the boss within the channel when the boss is inserted into the channel by contacting the boss, and (iii) a boss assembly region operable to facilitate the insertion of the boss into the channel, by allowing the boss to pass through the boss assembly region for insertion of the boss into the channel.

Claim 2. The patellar prosthesis of claim 1, wherein the first subcomponent comprises a base and wherein the second subcomponent comprises an articulating subcomponent.

Claim 3. The patellar prosthesis of claim 1, wherein:

- the boss comprises a stem and a head having a width;
- the channel has a first side and a second side, the second side spaced apart from the first side by a first distance; and

the boss retaining region comprises a lip, a first section having width and a second section having a width, the first section of the lip located on the first side of the channel and the second section of the lip located on the second side of the channel, the width of the head being greater than the first distance of the channel minus the width of the first section of the lip and minus the width of the second section of the lip.

Claim 4.

Claim 5.

Claim 6.

Claim 7.

Claim 8.

Claim 9.

Claim 10. The patellar prosthesis of claim 1, further comprising:

a spin stop operably connected to the first subcomponent, and wherein the second subcomponent further comprises:

a spin stop receiving chamber, the spin stop receiving chamber configured to receive the spin stop when the second subcomponent, boss and first subcomponent are assembled, such that the spin stop is movable within the spin stop receiving chamber.

Claim 11.

Claim 12.

Claim 13. The patellar prosthesis of claim 1, wherein the boss assembly region is offset from the channel.

Claim 14. The patellar prosthesis of claim 13, further comprising:

a spin stop operably connected to the first subcomponent, and wherein the second subcomponent further comprises:

a spin stop receiving chamber with a loading region, the loading region of the spin stop chamber configured such that when the boss is being inserted into the channel through the boss assembly region, the spin stop is inserted into the spin stop chamber loading region.

Claim 15.

Claim 16.

Claim 17.

Claim 18.

Claim 19.

Claim 20.

Claim 21.

Claim 22.

Claim 23.

Claim 24.

Claim 25.

Claim 26.

Claim 27.

Claim 28.

Claim 29.

Claim 30.

Claim 31. A patellar replacement component base comprising:

a generally planar bone contacting surface lying in a first plane;

a dome shaped contact surface for contacting a patellar articulating component and located generally opposite the bone contacting surface; and

a boss having a stem extending from the dome shaped articulating component contact surface along an axis, the axis of the stem intersecting the bone contacting surface plane at an angle of other than 90 degrees.

Claim 32.

Claim 33.

Claim 34.

Claim 35.

Claim 36.

Claim 37.

Claim 38. The patellar replacement component base of claim 31, further comprising:
a spin stop extending from the dome shaped contact surface along an axis, the axis of the spin stop intersecting the bone contacting surface plane at an angle of other than 90 degrees.

Claim 39. The patellar replacement component base of claim 38, wherein:
the boss includes a head portion extending outwardly from the stem portion, the head portion extending over a portion of the contact surface; and
the spin stop is cylindrically shaped.

Claim 40. The patellar replacement component base of claim 38, wherein:
the dome shaped contact surface forms an apex; and
the spin stop and the boss are on opposite sides of the apex when viewed from a side elevational view.

Claim 41. The patellar replacement component base of claim 31, wherein the dome shaped contact surface is spherical.

Claim 42. A patellar prosthesis comprising:
a first subcomponent;
a boss operably connected to the first subcomponent; and

a second subcomponent movably connected to the first subcomponent with the boss, the second subcomponent comprising,

a first side, the first side having (i) a channel therein, (ii) a boss retaining region having a first configuration operable to retain the boss within the channel when the boss is inserted into the channel by contacting the boss, and (iii) a boss assembly region having a second configuration operable to facilitate the insertion of the boss into the channel, the first configuration and the second configuration being different.

Claim 43. The patellar prosthesis of claim 42, wherein the first subcomponent comprises a base and wherein the second subcomponent comprises an articulating subcomponent.

Claim 44. The patellar prosthesis of claim 42, wherein:

the boss comprises a stem and a head having a width;

the channel has a first side and a second side, the second side spaced apart from the first side by a first distance; and

the boss retaining region comprises a lip, a first section having width and a second section having a width, the first section of the lip located on the first side of the channel and the second section of the lip located on the second side of the channel, the width of the head being greater than the first distance of the channel minus the width of the first section of the lip and minus the width of the second section of the lip.

Claim 45. The patellar prosthesis of claim 42, further comprising:

a spin stop operably connected to the first subcomponent, and wherein the second subcomponent further comprises:

a spin stop receiving chamber, the spin stop receiving chamber configured to receive the spin stop when the second subcomponent, boss and first subcomponent are assembled, such that the spin stop is movable within the spin stop receiving chamber.

Claim 46. The patellar prosthesis of claim 42, wherein the boss assembly region is connected to but offset from the channel.

Claim 47. The patellar prosthesis of claim 46, further comprising:

a spin stop operably connected to the first subcomponent, and wherein the second subcomponent further comprises:

a spin stop receiving chamber with a loading region, the loading region of the spin stop chamber configured such that when the boss is being inserted into the channel through the boss assembly region, the spin stop is inserted into the spin stop chamber loading region.

Claim 48. A patellar replacement component base comprising:

a body defining a generally planar bone contacting surface lying in a first plane, a dome shaped articulating component contact surface generally opposite the bone contacting surface;

a stem extending outwardly from the dome shaped articulating component contact surface of said body along a line, the line of the stem intersecting the bone contacting surface plane at an angle of other than 90 degrees; and

a head extending from said stem.

Claim 49. The patellar replacement component base of claim 48, wherein said body, said stem, and said head are integral with each other.

Claim 50. The patellar replacement component base of claim 48, wherein said body, said stem, and said head are made of a polymer.

Claim 51. A patellar replacement component base comprising:

a integral body defining generally planar bone contacting surface lying in a first plane, a dome shaped contact surface generally opposite the bone contacting surface; and

a stem extending outwardly from the dome shaped contact surface of said body in a direction away from the generally planar bone contacting surface along an axis, the axis of the stem intersecting the bone contacting surface plane at an angle of other than 90 degrees, the stem being integral with said body.

Claim 52. The patellar replacement component base of claim 51, further comprising a head extending from said stem.

Claim 53. The patellar replacement component base of claim 51, wherein said body and said stem are made of a polymer.

(9) EVIDENCE APPENDIX

None.

(10) RELATED PROCEEDINGS APPENDIX

None.